DIVISION OF ENTOMOLOGY, INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI-110 012, June 24, 1976. R. K. BHATNAGAR
R. K. BHANOTAR
Y. MAHTO
Y. N. SRIVASTAVA

REFERENCES

BHATNAGAR, R. K., BHANOTAR, R. K., & SRIVASTAVA, Y. N. (1973): Panting behaviour of *Uromastyx hardwickii* Gray. *Entomologist's Newsletter*, Delhi, 3(7): 46-47.

BHATNAGAR, R. K., BHANOTAR, R. K. & MAHTO, Y. (in press): Saurian winter activity in Thar Desert. Proc. Zool. Bengal; mss. pp. 1-10, 3 tables.

15. IDENTIFICATION OF SNAKE SKINS

(With two plates)

Madras and Calcutta are the two major centres where snake skins are tanned and exported. It may be interesting to note that from Madras a total number of 7,83,100 pieces of snake skins, valued at Rs. 1,35,99,320 have been exported between 1.1.76 and 31.12.76. Similarly during 1977, a total number of 6,38,750 pieces valued at Rs. 90,26,941 have been exported. For Calcutta the figures are as follows: during 1976 a record number of 15,23,626 skins valued at Rs. 68,89,565 and for 1977, about 10,99,192 skins valued at Rs. 1,01,97,391 have been exported. Mostly these skins are purchased by West Germany, U.K., Italy and France. It is also worthwhile to note that it is mainly skins of the Rat snake or Dhaman (Ptyas mucosus), that is being exported, while export of others like that of Cobra, Python, Russel's viper is almost negligible.

Identification of snakes, usually is done by the study of scales in the belly, the head and the back — whether it is scaly and uniform throughout or whether ventral shields extend the whole width or not and so on. All these processes are no doubt the best conclusive proof to know whether a snake is poisonous or otherwise. Unfortunately in identification of tanned skins meant for export, it is usually not possible to make use of these characteristics. It is for this simple reason that one cannot know whether the ventral plates extend the whole width of the belly or not. Also very rarely can one see all scales and shields on the head intact and in proper position.

The common snake skins that were being exported on a large scale belong to the following species:

- 1) Rat Snake or Dhaman.
- 2) The Indian Python.
- 3) The Common Cobra.
- 4) Russell's Viper.

Skins of the above snakes can be identified by the following characteristics:

Rat Snake:— Rat snake's skins are erroneously called "Whip-snake skins" by the trade. The real whip snake, however, is the common green whip snake (Ahaetulla nasutus), so called because of its very long, thin, whip-like body.

Rat snakes grow to a length of about 240 cm or even more and have a girth of about

10 cm. The tail is about one-fourth of the total length of the snake and the tail shields are divided. Skins of this snake are keenly sought after for their length. A portion of the skin has the following features that will help in identification:

- 1) There is a central band of scales consisting of three rows of costals which are distinctly different from the rest in that they are almost squarish.
- 2) On either side of this central band are seven rows of costals which are of different shapes in the top half, but lower down they are all alike and squarish. Thus all put together there are 17 rows of scales except near the tail where it may be one or two less.
- 3) The last row of costals bordering ventrals are slightly larger than all other scales.
- 4) Almost all the scales have black borders and appear in the form of irregular rings in the lower half of the body as well as tail.
- 5) On either end is one half of ventrals which are about 2 cm long and 7-8 mm wide. In a complete snake skin there is only one row of ventrals extending the whole width of the belly, but then it is slit down the middle of the belly at the time of skinning, so that in a tanned skin, it appears as if there are two rows of large scales one at either end.
- 6) The central band of scales are almost closely packed that they look like touching each other. In the flanks the scales are independent with lot of interspaces between one another.

Indian Python:— With a full length tanned skin, this is one of the easiest to identify by its length and width that are unsurpassed by any other Indian snake. A portion of the skin has the following features:

1) The scales are all quite small and are almost rectangular in shape except those at the flanks.

- 2) The scales are smallest at the centre, gradually becoming bigger towards the flanks.
- 3) The last row of scales that represents one half of the ventrals are the largest.
- 4) The last 8-10 rows almost overlap each other on the flanks.
- 5) Compared to the Rat snake, the ventrals are proportionately small in relation to the size of the skin. This is due to the fact that the ventrals do not cover the entire width of the belly.
- 6) In all there are about 70 rows of scales. Common Cobra:— Apart from the Python, the common Cobra is the easiest to identify whether dead or alive, of course if available with its monocled or spectacled hood. However, even without it, the following features will help identify a Cobra skin with ease:
- 1) There is a central row of narrow dorsals which are pearshaped and looks almost beaded running over the entire length from head to tail.
- 2) On either side of this mid dorsal row, there are usually 11 rows of dorsals arranged in an expanded 'V' shape.
- 3) All the scales are absolutely independent with lot of interspaces and rarely touch each other.
- 4) The last row of longitudinal scales are the real ventrals. Each ventral is two to two and a half centimetres long in a tanned skin.

Russell's Viper:—This is the commonest pitless viper of India and is a large snake growing to nearly 165 cm. in length but is more stoutly built than other vipers. It is a very handsome snake whose skin has the following distinctive characteristics:

- 1) There are three large more or less circular black bands arranged in three rows running over the entire length of the skin.
- 2) The middle row is more conspicuous than the others.





